

COMPLIANCE EVALUATION INSPECTION REPORT

Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road
Saugus, California 91350

EPA ID # CAD064573108

Inspected By: Larry Stuck
Date of Inspection: April 26, 1991
Report By: Larry Stuck
Date of Report: May 24, 1991

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I. Purpose:

To conduct a focused Compliance Evaluation Inspection (CEI).

II. Representatives Present:

Whittaker Corporation, Bermite Division (WBD):

Glen AbdunNur, Site Manager
Tim Bricker, Hazardous Materials Specialist

Department of Health Services / Toxic Substances Control Program
(Department):

Larry Stuck, Hazardous Materials Specialist
Javier Hinojosa, Hazardous Materials Specialist

III. Owner/Operator:

Bermite is a division of the Whittaker Corporation. Whittaker, a California corporation, is headquartered at 10880 Wilshire Blvd., Los Angeles, California 90024. It is presently headed by Joseph Alibrundi, Chairman. WBD discontinued operating its Saugus facility on April 3, 1987. It is presently undergoing closure. Staff currently in charge of closure activities are Glen AbdunNur and Tim Bricker.

IV. Background:

- | | |
|--------------------|--|
| October 31, 1980 | - WBD submitted a Resource Conservation Recovery Act (RCRA) Part A application to the US Environmental Protection Agency (EPA) for the storage and treatment of hazardous waste. |
| March 23, 1981 | - WBD submitted a revised RCRA Part A to EPA. |
| September 25, 1981 | - The Department issued WBD an Interim Status Document (ISD) number CAD064573108 for the storage and treatment of hazardous waste. |
| September 22, 1982 | - EPA conducted a RCRA Interim Status Standard Inspection. |
| January 6, 1983 | - The Department conducted an ISD Compliance Inspection. Violations found included no signs, inadequate storage area, no fencing, no waste analysis plan, inadequate training records, incomplete contingency plan and inadequate financial assurance. |
| June 21, 1984 | - Department inspector Carl T. Nelson conducted an |

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inspection of the facility. WBD was found in compliance, except it was missing its 1983 Annual Report. This was later addressed in a Notice of Violation.

- January 28, 1985 - Department inspector David Chase conducted a follow-up inspection to the June/84 inspection. WBD was found in compliance. It was observed that WBD had closed its surface impoundments and was conducting open burn incineration.
- June 25, 1985 - EPA inspector Barry Cofer conducted an inspection of the facility. WBD was found in violation for incomplete waste analysis records, incomplete contingency plan, inadequate training records, incomplete manifests, inadequate closure plan and failure to adjust closure cost estimates.
- August 6, 1985 - Facility submitted to EPA a revised RCRA Part A application. The application identified the closure of the red phosphorous and organic solvents ponds.
- April 17, 1986 - Department inspector Barron Peeler conducted an inspection of the facility. Violations found included open containers and incomplete contingency plan.
- April 3, 1987 - WBD discontinued operating its Saugus facility.
- May 21, 1987 - Department inspectors Roy Thielking and John Baker conducted an inspection of the facility. WBD was found to be undergoing closure. No violations were noted.
- January 5, 1988 - Department inspectors Chong Kim, Greg Holmes and Paul Baranich conducted a Land Disposal Restriction (LDR) inspection. WBD was found to be inactive. It was going through closure. WBD was found to have previously shipped hazardous waste without notification of required further treatment. EPA was notified of the violations for proper enforcement action.
- June 22, 1988 - Department Financial Responsibility Unit (FRU) issued a Report of Violation (ROV) to WBD for failing to provide liability insurance against sudden and non-sudden accidental occurrences.
- November 28, 1988 - Department FRU issued WBD a 2nd ROV for failing to provide liability insurance against sudden and non-sudden accidental occurrences.

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- March 1, 1989 - Department FRU issued WBD an ROV for no financial assurance for closure.
- March 21, 1989 - WBD came into compliance with March 1, 1989 ROV.
- April 27, 1989 - Department inspector Javier Hinojosa conducted an inspection of the facility. Violations found included no inspection schedule, no annual training reviews, no closure cost estimate, no 1988 annual report, no personnel training records, no inspection log and no verification of financial assurance.

V. General Description of Facility:

See Inspection Report dated May 25, 1989.

VI. Hazardous Waste Activity Description:

WBD had in the past a total of fourteen hazardous waste units in operation. Presently nine of the hazardous waste units are certified closed, three are under final closure review by the Department and two require further monitoring and remediation prior to closure. Area # 342 is the location of a former phosphorous stabilization unit. This area now consists of one groundwater monitoring well. Three more monitoring wells are to be installed prior to closure. Area # 317 previously contained a solvent surface impoundment. This impoundment caused groundwater contamination. Presently a vapor extractor is being used to remediate this area.
(See Inspection Report dated May 25, 1989 for past activity).

VII. Observations:

On April 26, 1991, at approximately 0935 hours Department inspectors Javier Hinojosa and I arrived at the facility. We identified ourselves to the gate guard. He told us that he couldn't reach anyone to let us in. He stated that AbdunNur should be arriving soon.

AbdunNur arrived at 0940 hours and met with us. Initially he seemed reluctant to talk to us but Hinojosa explained that though most of the facility is closed, it is still under Departmental regulation and periodical inspections are required. AbdunNur then consented to the inspection and asked us to follow him into the facility.

We arrived at the office and AbdunNur started to explain that there was fourteen hazardous waste management units. Nine of the units have been closed, three of them are being reviewed by the Department for closure adequacy and two are being monitored and remediated. He stated that Tim Bricker was presently out taking probe readings. We asked him to take us to the two open units.

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We followed AbdunNur to area # 342 where a surface impoundment once existed to collect stabilized phosphorous prior to shipment off-site. Presently, one groundwater monitoring well is the only feature at this area (see Attachment 1, Photo 1). AbdunNur stated that the Department is requiring him to install three more wells to adequately assess the groundwater quality. He stated that he had just submitted an operation plan for these additional wells and that he expects to start drilling in June or July. He stated the reason the additional wells are required is that the pH of the soil is slightly different than in surrounding wells. In addition, the electric conductivity is higher, approximately 3,000 ohms compared to an approximate average of 400 ohms at surrounding wells. AbdunNur claimed that these values are insignificant and do not warrant the installation of additional monitoring wells. He is however complying with the Department's request.

We next drove to area # 317 where the solvent surface impoundment once existed. Soil has been excavated to 50 feet deep to remove contamination, however, samples showed trace amounts of trichloroethylene (TCE) to 120 feet (see Photo 2). A vapor extractor system has been installed at this site for soil remediation. A series of 15 probes extract vapor from the ground. The vapor is heated and sent through a catalytic converter where it is converted to hydrochloric acid gas (HCl). The HCl is then neutralized with water containing sodium carbonate. The effluent water is then sent down a hose and pumped through a series of three activated carbon beds and then back to a 5,000 gallon storage tank. AbdunNur stated the waste water is hauled as non-hazardous waste by Martin Pumping to Liquid Waste Management every couple months. There was no hazardous waste sign on the storage tank.

The vapor is checked with a Century organic vapor analyzer (OVA) prior to entering the treatment system. AbdunNur stated that the average readings have been about 1500 ppm TCE. After the vapor is run through the treatment unit, the residuals are again checked with the OVA and readings average approximately 10 ppm TCE. The effluent is once again checked after being run through the first of three carbon beds. AbdunNur stated that they have never detected any contamination at that point.

Groundwater monitoring well #4 at area # 317 shows trace amounts of TCE. AbdunNur stated that this well was originally showing 4 parts per billion (ppb) TCE, it has dropped to 1 ppb and he expects to reach non-detectable amounts by continued pumping. The water pumped from this well flows down a hill in a garden hose and into a carbon adsorption unit. The water is then pumped into two 20,000 gallon Baker tanks. The last water added to these tanks prior to filling is tested and if contaminant levels are below levels set by the California Regional Water Quality Control Board (WQCB), (eg. 5 ug/l TCE) the water is discharged to natural drainage on-site under a National Pollution Discharge Elimination System (NPDES) permit # CA0061069 (Attachment 2) from WQCB. AbdunNur stated that they have never detected any contaminants in the water coming out of the carbon unit and the Baker tanks have always been drained on-site. This system has been delisted by the Environmental Protection Agency (EPA). At the time of the inspection, well #

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Financial Assurance

- WBD is in litigation with the Department's Financial Responsibility Unit for closure, post-closure, liability and sudden and non-sudden release coverage. AbdunNur stated that their records were at the corporate office.

After reviewing the facility records, Hinojosa and I decided to go back to area # 317 to sample the wastewater from the 5,000 gallon storage tank. Bricker collected three samples for us from a sampling spigot. Bricker filled a 500 ml jar sample, # JH-WB-02, and two 40 ml volatile organic analysis (VOA) vials, sample # JH-WB-03 (brown glass vial provided by WBD) and sample # JH-WB-04 (clear glass vial provided by Department). The VOA vials were over filled and capped to prevent air bubbles. Bricker inverted the VOA vials and confirmed no bubbles were present. All samples collected were immediately sealed with evidence tape and placed in the Department vehicle. After collecting the samples the inspection was completed and we left the facility at approximately 1230 hours.

The samples were taken to the Department of Health Services Southern California Hazardous Materials Lab under chain of custody and received by Russ Chin with seals intact at approximately 1630 hours on April 26, 1991.

The results of the samples analyzed by the DHS Southern California Laboratory are shown as Attachment 3. The results indicate that soil sample # JW-WB-01, taken from below the outlet valve on the storage tank, contained elevated levels of barium, copper and zinc. The levels of these three metals were well below the Total Threshold Limit Concentration (TTLC) however were above the Soluble Threshold Limit Concentration (STLC). These results warrant additional testing according to Title 22, section 66700. A Waste Extraction Test (WET) will be run to further characterize this sample. Wastewater samples # JH-WB-03 and JH-WB-04 taken from the tank contain trace amounts of chloroform and bromochloromethane. The pH of these samples was 8.7 and 8.8 which is non-hazardous.

VIII. Violations:

Count 1: Title 22, California Code of Regulations (Cal. Code Regs.), section 67140 (a).

WBD failed to update its contingency plan to include the vapor extracting unit.

Evidence: AbdunNur stated that WBD's contingency plan was not updated to include the vapor extracting unit.

Witnesses: Department inspectors Larry Stuck and Javier Hinojosa witnessed all violations and statements.

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Count 2: Title 22, Cal. Code Regs. section 61704 (b).

WBD failed to develop and follow a written inspection schedule for inspecting monitoring equipment, safety and emergency equipment, and security devices.

Evidence: AbdunNur stated that WBD did not have an inspection schedule or log.

Witnesses: Larry Stuck and Javier Hinojosa.

Count 3: Title 22, Cal. Code Regs. section 67102 (a)(1).

WBD's waste analysis plan is incomplete as it does not include testing parameters for wastes entering and leaving the vapor extracting unit.

Witnesses: Larry Stuck and Javier Hinojosa.

Evidence: AbdunNur stated that WBD's waste analysis plan was not updated to include the vapor extracting unit.

Count 4: Title 22, Cal. Code Regs., section 67105 (c).

WBD personnel failed to take part in annual reviews of the initial training requirements.

Evidence: AbdunNur and Bricker stated that they have not completed any training or reviews since the April 27, 1989 inspection.

Witnesses: Larry Stuck and Javier Hinojosa.

IX. Attachments:

1. Photographs - 1 page.
2. National Pollution Discharge Elimination System (NPDES) Permit - 10 pages.
3. HML sample analysis results / chain of custody from April 26, 1991 inspection - 6 pages.
4. Analysis results from WBD's monitoring - 7 pages.

X. Witnesses:

1. Larry Stuck
Hazardous Materials Specialist
Department of Health Services

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Toxic Substances Control Program
Region 3 (Burbank)

Will testify to the events and statements made during the April 26, 1991 inspection.

2. Javier Hinojosa Hazardous Materials Specialist
Department of Health Services
Toxic Substances Control Program
Region 3 (Burbank)


Will testify to the events and statements made during the April 26, 1991 inspection.

XI. Signatures:



Larry Stuck
Hazardous Materials Specialist
Region 3 (Burbank)
Facilities Management Branch
Toxic Substances Control Program

5/24/91
Date Submitted



Paul Baranich
Senior Hazardous Materials Specialist
Region 3 (Burbank)
Facilities Management Branch
Toxic Substances Control Program

5/24/91
Date Approved

Attachment 1

Photographs of existing Units at WBD - 1 page.

NOTE: Photographs taken during the April 26, 1991 inspection did not come out. A photocopy of photographs showing areas # 317 and # 342 from the April 27, 1989 inspection are included.

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Photo 1. (Photo # 9 from inspection report dated May 25, 1989) Ground water monitoring well in area # 342 where the red phosphorous pond once existed. This area presently looks the same as this photo.

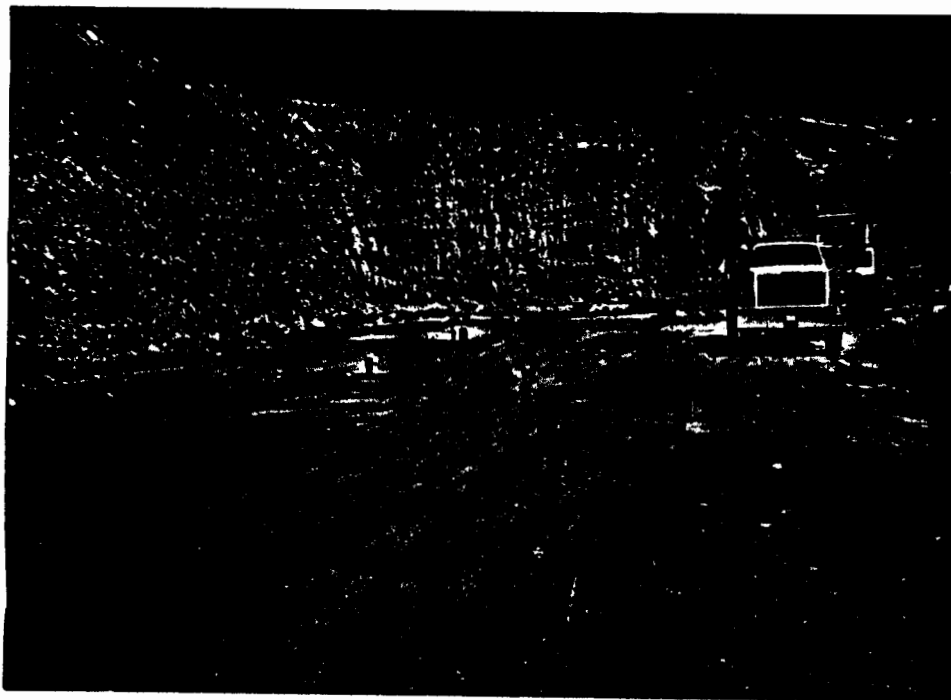


Photo 2. (Photo # 10 from inspection report dated May 25, 1989) Location where solvent surface impoundment once existed. Area has been excavated 50 feet deep and probes have been placed to a depth of 120 feet. This pit is still present.

Attachment 2

National Pollution Discharge Elimination System (NPDES) Permit - 10 pages.

4 was not in use due to mechanical failure of the pump motor. Another well, PW-1, is located between the Baker tanks and the carbon unit of this system. This well was drilled as a pumping well to create a cone of depression to stop the migration of groundwater contamination. AbdunNur stated that this well has never been used.

We walked back to the vapor extraction unit and noticed a white crust on the ground directly below the outlet valve on the 5,000 gallon wastewater storage tank. AbdunNur stated that it was calcium carbonate. Hinojosa collected a sample, # JH-WB-01, of this material with a plastic scoop.

Next we drove back to the office to look at facility records. The following records were requested for review and found as indicated below:

- | | |
|------------------------------------|--|
| <u>Revised Part A</u> | - WBD had a revised Part A application which included the vapor extracting system. |
| <u>Operation Plan</u> | - WBD had an adequate operation plan. |
| <u>Operation Record</u> | - WBD had operating records including sampling data and lab results. |
| <u>Contingency Plan</u> | - WBD did not have a contingency plan for the vapor extractor unit, however, had an adequate plan for the groundwater treatment system. |
| <u>Inspection Schedule and Log</u> | - WBD did not have an inspection schedule or log. |
| <u>Waste Analysis Plan</u> | - The waste analysis plan for the groundwater treatment system was found to be adequate however there was no plan available for the vapor extracting system. |
| <u>Training Record</u> | - WBD did not have any training records available. AbdunNur stated that he and Bricker have not had formal training or annual reviews since the April 27, 1989 inspection. |
| <u>Manifests</u> | - AbdunNur stated that the wastewater has not been sent out as hazardous waste on a manifest for three years. |
| <u>Closure Plan</u> | - AbdunNur could not provide us with an updated closure plan including the vapor extracting unit. |

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION**

101 Centre Plaza Drive
Monterey Park, California 91754-2156
(213) 266-7500



October 20, 1989

Gordon J. Louttit, Vice President
Whittaker Corporation
10880 Wilshire Bl.
Los Angeles, CA 90024

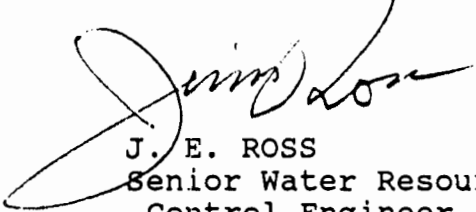
WASTE DISCHARGE REQUIREMENTS - WHITTAKER CORPORATION, BERMITE
DIVISION, SAUGUS (CA 0061069; CI 6891)

Reference is made to our letter dated October 11, 1989, which
transmitted the waste discharge requirements, adopted by this
Regional Board at the September 23, 1989, meeting, for your treated
ground water discharge.

The copy transmitted did not include the Executive Officer's
signature. Enclosed is the signed copy of the requirements.

We regret any inconvenience this may have caused.

If you have any questions, please call Greg Kwey at (213) 266-7584.



J. E. ROSS
Senior Water Resource
Control Engineer

cc: See attached mailing list

Enclosures

Gordon J. Louttit, Vice President
Page 2

Environmental Protection Agency, Region 9, Administrative
Service Division (W-5-1)
U.S. Army Corps of Engineers
Mr. Archie Matthews, State Water Resources Control Board,
Division of Water Quality
Department of Fish and Game, Region 5
Department of Water Resources
Department of Health Services, Toxic Substance Division,
Burbank
Department of Health Services, Public Water Supply Branch
South Coast Air Quality Management District
Los Angeles county Department of Public Works, Wastewater
Management Division
Los Angeles County, Department of Health Services
Jones/Day, Reavis and Pogus

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

ORDER NO. 89-090

NPDES NO. CA0061069

WASTE DISCHARGE REQUIREMENTS
FOR

WHITTAKER CORPORATION
(Bermite Division, Saugus)

The California Regional Water Quality Control Board, Los Angeles Region, finds:

1. Whittaker Corporation has filed a Report of Waste Discharge and has applied for waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permit.
2. Whittaker Corporation operated the Bermite Division at 22116 West Soledad Canyon Road, Saugus, California, until its closure on April 3, 1987. As a requirement of the RCRA closure plan, two of the RCRA units (317 area and 342 area) require a ground water monitoring system capable of detecting and assessing the impact of the RCRA units on the uppermost aquifer at the Bermite Facility.
3. The first and second quarterly sampling events, which took place in October of 1988 and January of 1989 respectively, did not detect any contamination of the ground water. However, three volatile organic compounds - trichloroethylene, tetrachloroethylene, and 1,1-dichloroethylene - were detected in monitoring well MW-4, as the results of the third sampling event in April of 1989.
4. Whittaker Corporation has proposed to remediate the contaminated ground water by pumping the ground water, removing any volatile organic compounds by filtration through granular activated carbon and, following analysis of the treated water, discharging it to the Santa Clara River via surface discharge.
5. The Board adopted a revised Water Quality Control Plan for the Santa Clara River Basin (4A) on April 27, 1978. The plan contained water quality objectives for Santa Clara River. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.

6. The beneficial uses of the receiving waters are: agricultural supply, ground water recharge, fresh water replenishment, warm fresh water habitat, wildlife habitat, water contact recreation, and non-contact water recreation.
7. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.

The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public hearing heard and considered all comments pertaining to the discharge and to the tentative requirements.

This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act, or amendments thereto, and shall take effect at the end of ten days from the date of its adoption provided the Regional Administrator, EPA, has no objections.

IT IS HEREBY ORDERED, that Whittaker Corporation, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. Waste discharged shall be limited to treated ground water only, as proposed.
2. The discharge of an effluent with constituents in excess of the following limits is prohibited:

<u>Constituents</u>	<u>Units of Measurements</u>	<u>Discharge Limitations</u>	
		<u>30-Day Ave.</u>	<u>Maximum</u>
Suspended solid	mg/l	50	150
Settleable solids	mg/l	0.1	0.3
Oil and grease	mg/l	10	15
Phenols	ug/l	----	1
Trichloroethylene	ug/l	----	5
Tetrachloroethylene	ug/l	----	4
1,1 dichloroethylene	ug/l	----	6
Benzene	ug/l	----	0.7
Toluene	ug/l	-----	10
Xylene	ug/l	-----	10
Ethylbenzene	ug/l	-----	10
Lead	ug/l	-----	50

3. The toxicity of the effluent shall be such that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70% survival.
4. The dry weather discharge of treated ground water effluent off-site of property owned or controlled by the discharger (Whittaker Corporation) is prohibited.

B. Requirements and Provisions

1. Prior to the initiation of this ground water treatment project, a workplan shall be submitted to this Board for approval.
2. This Order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements".

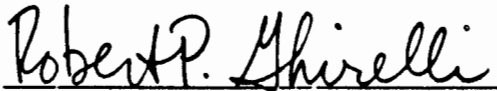
C. Expiration Date

This Order expires on September 10, 1994.

This discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code,

not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on September 25, 1989.

A handwritten signature in cursive script that reads "Robert P. Ghirelli". The signature is written in dark ink and is positioned above a horizontal line.

ROBERT P. GHIRELLI, D.Env.
Executive Officer

GK/

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION
MONITORING AND REPORTING PROGRAM NO. CI 6891
FOR

WHITTAKER CORPORATION
(Bermite Division, Saugus)

The discharger shall implement this monitoring program on the effective date of this Order. The first monitoring report under this program is due by January 15, 1990. Following the October report, all additional monitoring analyses shall be compiled monthly and submitted as quarterly reports. The quarterly report submittals are due by the fifteenth day of the following months: January, April, July, and October.

Any instance of noncompliance shall be reported by telephone to Board staff as soon as discharger has knowledge of the noncompliance.

For treated groundwater discharges:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Total waste flow	gal/day	----	daily,
Trichloroethylene	ug/l	grab	daily ¹ ,
Tetrachloroethylene	ug/l	grab	daily ¹ ,
1,1-dichloroethylene	ug/l	grab	daily ¹ ,
pH	pH units	grab	quarterly
Temperature	°F	grab	quarterly
Total Dissolved Solids	mg/l	grab	quarterly
Chloride	ml/l	grab	quarterly
Sulphate	mg/l	grab	quarterly
Suspended solids	mg/l	grab	quarterly
Settleable solids	ml/l	grab	quarterly
Oil and grease	mg/l	grab	quarterly
Phenols	mg/l	grab	quarterly
Nitrogen (NO ₃ +NO ₂)	mg/l	grab	annually
Benzene	ug/l	grab	annually
Toluene	ug/l	grab	annually
Xylene	ug/l	grab	annually
Priority pollutants (listed in page T-3)	ug/l	grab	annually

¹After one month of daily monitoring, the minimum frequency of monitoring shall be weekly; after five months of weekly monitoring, the minimum frequency of monitoring shall be monthly.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Toxicity ²	% survival	grab	quarterly

The report for the October - December quarter shall include the results for all annual analyses.

Ordered by:

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

Date: September 25, 1989

²By the method specified in "Guidelines for Performing Static Acute Toxicity Fish Bioassays in Municipal and Industrial Wastewater," July 1976 (California State Water Resources Control Board and Department of Fish and Game). Submission of bioassay results must include the information noted on page 31 of the "Guidelines". The fathead minnow (*Pimephales promelas*) may be used as the test species instead of the golden shiner (*Notemigonus crysoleucas*). If the results of toxicity tests yield a survival of less than 90%, the frequency of analyses shall be increased to weekly until at least three test results have been obtained and full compliance with Effluent Limitation A3 has been demonstrated, after which the frequency of analyses shall revert to quarterly.

PRIORITY POLLUTANTSMetals

Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

Base/Neutral Extractibles

(EPA Method 625)
Acenaphthene
Benzidine
1,2,4-Trichlorobenzene
Hexachlorobenzene
Hexachloroethane
Bis (2-Chloroethyl) Ether
2-Chloronaphthalene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
3,3'-Dichlorobenzidine
2,4-Dinitrotoluene
2,6-Dinitrotoluene
1,2-Diphenylhydrazine
Fluoranthene
4-Chlorophenyl Phenyl Ether
4-Bromophenyl Phenyl Ether
Bis (2-Chloroisopropyl) Ether
Bis (2-Chloroethoxy) Methane
Hexachlorobutadiene
Hexachlorocyclopentadiene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodimethylamine
N-Nitrosodi-N-Propylamine
M-Nitrosodiphenylamine
Bis (2-Ethylhexyl) Phthalate
Butyl Benzyl Phthalate
Di-N-Butyl Phthalate
Di-N-Octyl Phthalate
Diethyl Phthalate
Dimethyl Phthalate
Benzo (A) Anthracene
Benzo (A) Pyrene
Benzo (B) Fluoranthene
Benzo (K) Fluoranthene
Chrysene
Acenaphthylene
Anthracene
1,12-Benzoperylene
Fluorene
Phenanthrene
1,2,5,6-Dibenzanthracene
Indeno (1,2,3-CD) Pyrene

Acid Extractibles

(EPA Method 625)
2,4,6-Trichlorophenol
P-Chloro-M-Cresol
2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2-Nitrophenol
4-Nitrophenol
2,4-Dinitrophenol
4,6-Dinitro-O-Cresol
Pentachlorophenol
Phenol

Volatile Organics

(EPA Method 624)
Acrolein
Acrylonitrile
Benzene
Carbon Tetrachloride
Chlorobenzene
1,2-Dichloroethane
1,1,1-Trichloroethane
1,1-Dichloroethane
1,1,2-Trichloroethane
1,1,2,2-Tetrachloroethane
Chloroethane
Chloroform
1,1-Dichloroethylene
1,2-TransDichloroethylene
1,2-Dichloropropane
1,2-Dichloropropylene
Ethylbenzene
Methylene Chloride
Methyl Chloride
Methyl Bromide
Bromoform
Bromodichloromethane
Dibromochloromethane
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl Chloride
2-Chloroethyl Vinyl Ether

Miscellaneous

Cyanide
Asbestos*

*Not required
unless specifically
requested.

Pesticides

(Method 625)

Aldrin
Chlordane
Dieldrin
4,4'-DDT'
4,4'-DDE
4,4'-DDD
Alpha Endosulfan
Beta Endosulfan
Endosulfan Sulfate
Endrin
Endrin Aldehyde
Heptachlor
Heptachlor Expoxide
Alpha BHC
Beta BHC
Gamma BHC
Delta BHC
Toxaphene
PCB 1016
PCB 1221
PCB 1232

Whittaker Corporation, Bermite Division

CA0061069

PCB 1242

Pyrene

PCB 1248

TCDD

PCB 1254

PCB 1260

Attachment 3

HML sample analysis results / Chain of custody - 6 pages.

Stuck
MAY 3 1991

SOUTHERN CALIFORNIA LABORATORY
HAZARDOUS MATERIALS UNIT
1449 Temple Street, Los Angeles Ca. 90026
Tel: 213 620-3376

Narrative

1. This analytical report package was prepared for SCL Samples: 9852,9853
2. Samples were collected on 4/26/91 at Whittaker Bermite
3. Collector's name on the sample analysis request form is : Larry Stuck
4. Samples were :
Received on 4/26/91
Analyzed on : Finnigan 4500 GC/MS By EPA Method No.: 8260
Data package was completed on 5/2/91
5. During the course of of these analysis, no problem was encountered.
6. Quality Control
No trip blank accompanied this set of samples.
No duplicate sample was submitted.
Not enough sample submitted to perform matrix spike analysis.
7. Holding times were met.
8. Instrument initial calibration & continuing calibration criteria were met.

Southern California Laboratory - Hazardous Materials Unit
1449 Temple Street, Los Angeles Ca. 90026
Telephone 213-620-3376

To : Larry Stuck
Sample Location : Whittaker Bermite

SCL No. : 9852, 9853
Date : 5/1/91

GC/MS VOLATILE ORGANIC COMPOUND ANALYSIS by EPA 8260						DETECTION LIMIT			
COMPOUNDS	SCL NO.		9852	9853	Blank	9852	9853	Blank	
	COL. NO.		JH-WB-03	JH-WB-04		JH-WB-03	JH-WB-04		
	MATRIX		liquid	liquid	water	liquid	liquid	water	
	UNIT		mcg/l	mcg/l	mcg/l	mcg/l	mcg/l	mcg/l	

		CAS No.						
METHYLENE CHLORIDE		75-09-2	ND	ND	ND	1	1	1
1,1,2-TRICHLORO-TRI- FLUOROETHANE (FREON 113)		354-58-5	ND	ND	ND	1	1	1
CHLOROFORM		67-66-3	21	~52	ND	1	1	1
1,1,1-TRICHLOROETHANE		71-55-6	ND	ND	ND	1	1	1
1,2-DICHLOROETHANE		107-06-2	ND	ND	ND	1	1	1
BENZENE		71-43-2	ND	ND	ND	1	1	1
CARBONTETRACHLORIDE		56-23-5	ND	ND	ND	1	1	1
TRICHLOROETHYLENE		79-01-6	ND	ND	ND	1	1	1
TOLUENE		108-88-3	ND	ND	ND	1	1	1
PERCHLOROETHYLENE		127-18-4	ND	ND	ND	1	1	1
CHLOROBENZENE		108-90-7	ND	ND	ND	1	1	1
ETHYLBENZENE		100-41-1	ND	ND	ND	1	1	1
M&P-XYLENES	108-38-3,	106-42-3	ND	ND	ND	1	1	1
STYRENE		100-42-5	ND	ND	ND	1	1	1
O-XYLENE		95-47-6	ND	ND	ND	1	1	1
CUMENE		98-82-8	ND	ND	ND	1	1	1
O-CHLOROTOLUENE		95-49-8	ND	ND	ND	1	1	1
N-PROPYL BENZENE		103-65-1	ND	ND	ND	1	1	1
P-CHLOROTOLUENE		106-43-4	ND	ND	ND	1	1	1
1,3,5-TRIMETHYLBENZENE		106-06-6	ND	ND	ND	1	1	1
T-BUTYLBENZENE		98-06-6	ND	ND	ND	1	1	1
1,2,4-TRIMETHYLBENZENE		95-63-6	ND	ND	ND	1	1	1
1,3 DICHLOROBENZENE		541-73-1	ND	ND	ND	1	1	1
sec-BUTYLBENZENE		135-98-8	ND	ND	ND	1	1	1
P-DICHLOROBENZENE		106-46-7	ND	ND	ND	1	1	1
P-CYME		99-87-6	ND	ND	ND	1	1	1
O-DICHLOROBENZENE		95-50-1	ND	ND	ND	1	1	1
N-BUTYLBENZENE		104-51-8	ND	ND	ND	1	1	1
1,2,4-TRICHLOROBENZENE		102-82-1	ND	ND	ND	1	1	1
NAPHTHALENE		91-20-3	ND	ND	ND	1	1	1
1,2,3-TRICHLOROBENZENE		87-61-6	ND	ND	ND	1	1	1
ACETONE		67-64-1	NA	NA	NA			
METHYL ISOBUTYL KETONE		108-10-1	NA	NA	NA			
METHYL ETHYL KETONE		78-93-3	NA	NA	NA			
1,1 DICHLOROETHYLENE		75-35-4	ND	ND	ND	1	1	1
1,2 DICHLOROETHYLENE (T)		156-60-5	ND	ND	ND	1	1	1
1,1 DICHLOROETHANE		75-34-3	ND	ND	ND	1	1	1
1,2 DICHLOROETHYLENE (C)		156-69-4	ND	ND	ND	1	1	1
1,1 DICHLOROPROPENE		563-58-6	ND	ND	ND	1	1	1
1,2 DICHLOROPROPENE			ND	ND	ND	1	1	1
1,2 DICHLOROPROPANE		78-87-5	ND	ND	ND	1	1	1
BROMODICHLOROMETHANE		74-97-5	<5	9	ND	1	1	1
1,3 DICHLOROPROPENE (C)	10061-01-5		ND	ND	ND	1	1	1
1,3-DICHLOROPROPENE (T)	10061-02-6		ND	ND	ND	1	1	1
1,1,2 TRICHLOROETHANE		79-00-5	ND	ND	ND	1	1	1
1,3 DICHLOROPROPANE		142-28-9	ND	ND	ND	1	1	1
DIBROMOCHLOROMETHANE		124-38-1	ND	ND	ND	1	1	1
BROMOFORM		75-25-2	ND	ND	ND	1	1	1
ETHYLENE DIBROMIDE		74-95-3	ND	ND	ND	1	1	1
1,1,2,2 TETRACHLOROETHANE		630-20-6	ND	ND	ND	1	1	1
1,2,3 TRICHLOROPROPANE		96-18-4	ND	ND	ND	1	1	1
HEXACHLOROBUTADIENE		87-68-3	ND	ND	ND	1	1	1
VINYL CHLORIDE		75-01-4	ND	ND	ND	1	1	1

Estimated Values Note: ND = NOT DETECTED NA = NOT ANALYZED MCG = MICROGRAMS

Analyst's Signature

Supervising Chemist's Signature

[Signature] 5/2/91

[Signature] 5/2/91

MAY 16 1991

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST			All applicable items must be completed		1. HML No. To <u>SCG-0577</u>	2. Page of
3. Collector/Address <u>Larry Stuck</u> <u>1405 N San Fernando Blvd., Burbank, CA 91504</u>			4. Phone <u>(818) 567-3034</u>		5. Priority <u>3</u> a. Authorized by _____	
6. Date Sampled <u>4-26-91</u>			7. Time Sampled <u>1200</u> Hours		8. Codes (fill in all applicable codes)	
9. Activity <input checked="" type="checkbox"/> Enf <input type="checkbox"/> Surv <input type="checkbox"/> Site Mit <input type="checkbox"/> Permitting <input type="checkbox"/> Ait Tech <input type="checkbox"/> Other						
10. SAMPLING LOCATION <u>CAD064573108</u> a. EPA ID No.						
b. Site <u>Whittaker Bermite</u>						
c. Address <u>22116</u> <u>W. Soledad Canyon Blvd.,</u> <u>Sanger</u> <u>91350</u> Number Street City Zip						
11. SAMPLES						
a. ID	b. Collector's No.	c. HML No.	d. Type	e. Type	f. Size	
A.	<u>JH-WB-01</u>	<u>9850</u>		<u>Soil</u>	<u>500 ml</u>	<u>gray soil with white</u> <u>lumps of stones crushed</u> <u>old information & silver</u> <u>CaCO₃ on soil</u> <u>slightly of color</u> <u>water sample</u> <u>11 - 11</u>
B.	<u>JH-WB-02</u>	<u>9851</u>		<u>lig</u>	<u>500 ml</u>	
C.	<u>JH-WB-03</u>	<u>9852</u>		<u>lig</u>	<u>25 ml</u>	
D.	<u>JW-WB-04</u>	<u>9853</u>		<u>lig</u>	<u>25 ml</u>	
E.						
F.						
G.						
H.						
12. ANALYSIS REQUESTED						
a. <input checked="" type="checkbox"/> pH <u>3+4</u>	b. <input checked="" type="checkbox"/> Metal Scan <u>1+2</u>	c. <input type="checkbox"/> Metals (Spec)	d. <input type="checkbox"/> W.E.T.	f. <input type="checkbox"/> PCB	g. <input checked="" type="checkbox"/> VOA <u>3+4</u>	h. <input type="checkbox"/> PAH
				i. <input type="checkbox"/> Phenols	j. <input type="checkbox"/> Carba-mates	k. <input type="checkbox"/> Ext. Org (Screening)
				l. <input type="checkbox"/> Chlorinated Pesticides		
				m. <input type="checkbox"/> Organo-P Pesticides		
				n. <input type="checkbox"/>		
				o. <input type="checkbox"/>		
13. CHAIN OF CUSTODY						
a.	<u>Larry Stuck</u> Signature	<u>Larry Stuck / HML S</u> Name/Title	<u>4/26/91 - 4/26/91</u> Inclusive Dates			
b.	<u>Russ Chin</u> Signature	<u>Russ Chin / PHC IV</u> Name/Title	<u>4/26/91 - 1 1</u> Inclusive Dates			
c.	_____ Signature	_____ Name/Title	<u>1 1 - 1 1</u> Inclusive Dates			
d.	_____ Signature	_____ Name/Title	<u>1 1 - 1 1</u> Inclusive Dates			
14. SPECIAL REMARKS						
15. RECEIVED BY <u>Russ Chin</u> a. Title <u>PHC IV</u> b. Date <u>4/26/91</u>						
16. SAMPLE ALLOCATION a. <input type="checkbox"/> HML-Berkeley b. <input type="checkbox"/> HML-SC c. <input type="checkbox"/> AIHL d. <input type="checkbox"/> Contract b. Date						
17. ANALYSIS REQUESTED						

Southern California Laboratory Section - Hazardous Materials Unit
1449 Temple Street Los Angeles Ca. 90026
Telephone 213-620-3376

To : Larry Stuck SCL No. : 9850--9853

Sampling No. : SEE BELOW Date of Report: 5/14/91

Sample Location: Whittaker Bermite-22116 W. Sloedad Cyn Blvd, Saugas, 91350

Analytical Procedures Used: Digestion : HMU 324

Analysis : EPA 6010

Analysis Results:

SCL NO.	9850	9851	9852	9853				
Field No.	JH-WB-01	JH-WB-02	JH-WB-03	JH-WB-04				
Units	mg/Kg	mg/L	pH units	pH units				
Silver	<50	<1	-	-				
Arsenic	<50	<1	-	-				
Barium	450	<1	-	-				
Beryllium	<10	<.2	-	-				
Cadmium	<10	<.2	-	-				
Cobalt	<50	<1	-	-				
Chromium	<50	<1	-	-				
Copper	60	<1	-	-				
Molybdenum	<50	<1	-	-				
Nickel	<50	<1	-	-				
Lead	<50	<1	-	-				
Antimony	<50	<1	-	-				
Selenium	<10	<.2	-	-				
Thallium	<50	<1	-	-				
Vanadium	<50	<1	-	-				
Zinc	280	<1	-	-				
pH at 23 C	Not Requested		8.7	8.8				

Analyst's Signature

Prem S Hira

Date

Supervisor's Signature

Danice Wakakua

Date

QC Summary for Metal Analysis
Southern California Laboratory - Hazardous Materials Unit
1449 Temple Street, Los Angeles, Ca. 90026
Telephone 213-620-3376

To : Larry Stuck Sample Set SCL No. : 9850-9853
Matrix : Soil Date of Analysis : 5/14/91
Level of Spike : 10 mcg/ml Standard Lot Number: SP0391DK100
Duplicate done on : 9850 Spike done on : 9850
Sample Location: Whittaker Bermite - 22116 W. Soledad Cyn Blvd, Saugas, 91350
Analytical Procedures Used: Digestion: HMU 324 Analysis: EPA 6010

	Reagent Blank	Method Std % Rec	Reference Material			% RPD		Matrix Spike % Rec
			Expected Range	Found Dup A	Dup B	Ref Material	SMPL DUP	
I.D. of the Reference material: RM M 1088								
Units	mg/Kg	%	mg/Kg	mg/Kg	mg/Kg	%	%	%
Silver	<1	103	360-505	431.0	429.6	<1	*	83
Arsenic	<1	95	1550-1890	1673	1643	2	*	89
Barium	<1	106	2820-4480	4209	3961	6	<1	91
Beryllium	<0.2	109	41-96	83.95	84.81	1	*	94
Cadmium	<0.2	105	406-490	423.5	434.6	3	*	87
Cobalt	<1	105	3280-3990	3564	3619	1	*	90
Chromium	<1	103	2110-2550	2256	2287	1	*	88
Copper	<1	102	1900-2760	2249	2282	1	1	86
Molybdenum	<1	103	2970-3600	3135	3107	<1	*	82
Nickel	<1	105	1660-2010	1799	1834	2	*	86
Lead	<1	104	900-1150	981.8	1080	10	*	86
Antimony	<1	100	310-548	476.0	444.2	7	*	92
Selenium	<0.2	105	380-500	452.2	409.1	10	*	91
Thallium	<1	98	580-1060	790.4	778.4	2	*	69**
Vanadium	<1	100	3060-3680	3332	3278	2	*	95
Zinc	<1	108	2570-3280	2877	2974	3	<1	102
Acceptable Range		80%-120%				20%		75%-125%

NOTE: * Below the detectable level

NOTE: ** Spike recovery is low possibly because of matrix effect

Analyst's Signature

Prem S Hira
Prem S Hira

5/14/91
Date

Supervisors Signature

Janice Wakakuwa
Janice Wakakuwa
5/15/91
Date

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST		All applicable items must be completed	1. HML No. To <u>SCG-527</u>	2. Page of																
3. Collector/Address <u>Larry Stuck</u> <u>105 N San Fernando Blvd., Burbank, CA 91504</u>		4. Phone (818) <u>567-3034</u>		5. Priority <u>3</u> a. Authorized by _____																
6. Date Sampled <u>4-26-91</u>		7. Time Sampled <u>1200</u> Hours		8. Codes (fill in all applicable codes) a. STC <table border="1" style="display: inline-table;"><tr><td>3</td><td>0</td><td>3</td><td>4</td></tr></table> b. Region <u>5</u> c. TPC <table border="1" style="display: inline-table;"><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> d. INDEX <u>7040</u> e. PCA <u>31005</u> f. SITE <table border="1" style="display: inline-table;"><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> g. County <u>31</u>	3	0	3	4												
3	0	3	4																	
9. Activity <input checked="" type="checkbox"/> Enf <input type="checkbox"/> Surv <input type="checkbox"/> Site Mit <input type="checkbox"/> Permitting <input type="checkbox"/> Ait Tech <input type="checkbox"/> Other																				
10. SAMPLING LOCATION <table border="1" style="display: inline-table;"><tr><td>C</td><td>A</td><td>D</td><td>0</td><td>6</td><td>4</td><td>5</td><td>7</td><td>3</td><td>1</td><td>0</td><td>8</td></tr></table> a. EPA ID No. b. Site <u>Whittaker Bermite</u> c. Address <u>22116</u> <u>W. Soledad Canyon Blvd.,</u> <u>Saugus</u> <u>91350</u> Number Street City Zip				C	A	D	0	6	4	5	7	3	1	0	8					
C	A	D	0	6	4	5	7	3	1	0	8									
11. SAMPLES																				
Container																				
a. ID	b. Collector's No.	c. HML No.	d. Type	e. Type	f. Size	g. Field Information														
A.	<u>JH-WB-01</u>	<u>9850</u>		<u>Soil</u>	<u>500 ml</u>	<u>CaCO₃ on soil</u>														
B.	<u>JH-WB-02</u>	<u>9851</u>		<u>liq</u>	<u>20 ml</u>															
C.	<u>JH-WB-03</u>	<u>9852</u>		<u>liq</u>	<u>25 ml</u>															
D.	<u>JW-WB-04</u>	<u>9853</u>		<u>liq</u>	<u>25 ml</u>															
E.																				
F.																				
G.																				
H.																				
12. ANALYSIS REQUESTED					k. <input type="checkbox"/> Ext. Org (Screening)															
a. <input checked="" type="checkbox"/> pH	<u>3+4</u>	f. <input type="checkbox"/> PCB		l. <input type="checkbox"/> Chlorinated Pesticides																
b. <input checked="" type="checkbox"/> Metal Scan	<u>1+2</u>	g. <input checked="" type="checkbox"/> VOA		m. <input type="checkbox"/> Organo-P Pesticides																
c. <input type="checkbox"/> Metals (Spec)		h. <input type="checkbox"/> PAH		n. <input type="checkbox"/>																
d. <input type="checkbox"/> W.E.T.		i. <input type="checkbox"/> Phenols		o. <input type="checkbox"/>																
j. <input type="checkbox"/> Carba-mates																				
13. CHAIN OF CUSTODY																				
a.	<u>Larry Stuck</u> Signature	<u>Larry Stuck / HMS</u> Name/Title	<u>4/26/91 - 4/26/91</u> Inclusive Dates																	
b.	<u>Russ Chin</u> Signature	<u>Russ Chin / PHC IV</u> Name/Title	<u>4/26/91 - 1 1</u> Inclusive Dates																	
c.			<u>1 1 - 1 1</u> Inclusive Dates																	
d.			<u>1 1 - 1 1</u> Inclusive Dates																	
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16. SAMPLE ALLOCATION a. <input type="checkbox"/> HML-Berkeley b. <input type="checkbox"/> HML-SC c. <input type="checkbox"/> AIHL d. <input type="checkbox"/> Contract b. Date																				
ANALYSIS REQUESTED																				

Attachment 4

WBD monitoring analysis results - 7 Pages.

FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

March 29, 1990
Lab No.: 24375

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

RE: WATER ANALYSES - MONITORING WELL #4

Presented below are the results of the analyses performed on your samples received on March 8, 1990. The samples have been described, as received, along with the data.

DATA

<u>Sample Description</u>	<u>Results</u>	<u>TCE</u>		<u>Results</u>	<u>PCE</u>	
		<u>DLR</u>	<u>MCL</u>		<u>DLR</u>	<u>MCL</u>
Filtered	ND	0.5	5.0	ND	0.5	4.0
NOT Filtered	11	1.0	5.0	ND	1.0	4.0

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL



Eric Lu, Ph.D.
Environmental Chemist

EL:mlh

4 TH. LOAD
3-20-90
Start Discharge
3:PM

3-21-90
Stop Discharge
9:AM



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

July 29, 1990
Lab No.: 28585

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

RE: WATER ANALYSES - MW4

Presented below are the results of the analyses performed on your samples received on July 18, 1990. The samples have been described, as received, along with the data.

DATA

	<u>Filtered</u>	<u>Not-Filtered</u>	<u>DLR</u>
Tetrachloroethene	ND	ND	0.5
1,1-Dichloroethene	ND	ND	0.5
Trichloroethene	ND	3.9	0.5

Note: Analyzed via GC/MS Purge and Trap (25ml Sample Volume)

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Uday Sathe, M.S.
Environmental Chemist

US:mlh

*6th Load
Start Discharge at
100 PM-7-20-90
Stop 7-21-90 8:00AM*



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 7, 1990
Lab No.: 33516

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

Presented below are the results of the analyses performed on your samples received on November 26, 1990. The samples have been described, as received, along with the data.

DATA

	<u>Filtered</u>	<u>Not-Filtered</u>	<u>DLR</u>
Tetrachloroethene	ND	ND	0.5
1,1-Dichloroethene	ND	ND	0.5
Trichloroethene	ND	1.1	0.5

Note: Analyzed via GC/MS Purge and Trap (25ml Sample Volume)

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Uday Sathe, M.S.
Environmental Chemist

US:mlh

9th Load
Start Discharge
12-4-90 9:00 AM
Stop 12-5-90 7:00 AM

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Quarterly and Annual Report

October through December 1990

NPDES No. CA0061069

Delta Project No. 40-90-038

Page 3

TABLE 2

Summary of the Chemical Results for Selected Volatile Organics
for the Nonfiltered and Filtered Ground Water Pumped from Monitoring Well MW-4

Parameter	Units	<u>Dates Samples Were Collected</u>						
		<u>01/04/90</u>	<u>03/08/90</u>	<u>06/14/90</u>	<u>07/17/90</u>	<u>08/15/90</u>	<u>10/02/90</u>	<u>11/26/90</u>
1,1-Dichloroethylene(nonfiltered)	ug/l	--- ^a	---	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethylene (nonfiltered)	ug/l	---	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethylene (nonfiltered)	ug/l	---	11.0	6.1	3.9	2.8	1.7	1.1
1,1-Dichloroethylene (filtered)	ug/l	<0.5	---	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethylene (filtered)	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethylene (filtered)	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

^aNot sampled.

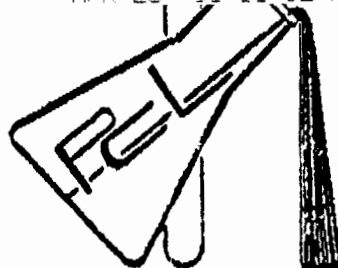
A copy of the *Discharge Monitoring Report* is presented in Appendix A, and copies of the original laboratory data sheets for this quarter are provided in Appendix B.

Several miscellaneous parameters are collected and analyzed on a quarterly basis. Analytical results for pH, oil and grease, chloride, sulfate, total dissolved solids, phenols, suspended solids, and settleable solids were consistent with last quarter's results. Table 3 summarizes the analytical results. Copies of the laboratory data sheets for this quarter are provided in Appendix B.

TABLE 3

Summary of the Results for the Parameters Analyzed on a
Quarterly Basis for the Ground Water at Monitoring Well MW-4

Parameter	Units	<u>Dates Samples Were Collected</u>		
		<u>04/17/90</u>	<u>07/17/90</u>	<u>10/18/90</u>
pH	pH	7.8	8.4	7.5
Oil and grease	units	6	<1.0	<1.0
Chloride	mg/l	56	51	49
Sulfate	mg/l	32	42	50
Total dissolved solids	mg/l	376	320	352
Phenols	mg/l	<0.1	<0.1	<0.1
Suspended solids	mg/l	<1.0	<1.0	1.0
Settleable solids	mg/l	<0.1	<0.1	<0.1



PATCHEM LABORATORIES

2205 First St. #108 • Simi Valley, CA 93065 • (805) 581-9006

Customer: Martin Industrial Pumping
P.O. Box 1128
Canyon Country, CA 91351

Attention: Mr. Tom Martin

Sample Date: 10-2-90

Report Date: 10-23-90

Sample I.D.: 8010-3940

Subject: Bernite Wastewater Sample -- TTLC

Method: Sample was analyzed per EPA Methods for Chemical Analysis of
Water and Waste (EPA-600/4-79-020).

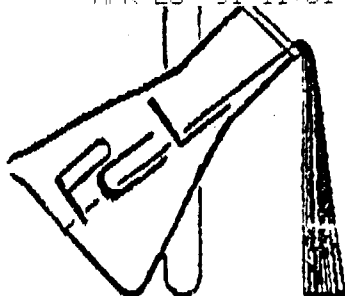
Results:

PARAMETER	EPA METHOD	DETECTION LIMIT	ANALYSIS
Volatile Organics	824	0.01 mg/L	< 0.01 mg/L
BNA'S	825	0.01 mg/L	< 0.01 mg/L
PCB's & Pesticides	8080	0.01 mg/L	< 0.01 mg/L
Herbicides	8150	0.01 mg/L	< 0.01 mg/L
Benzene/Toluene/Xylene	8020	0.01 mg/L	< 0.01 mg/L

Comments: Compounds detectable by method 8150/8020/8080/824/825, but not listed, would have been reported if present at or above the limit of detection.

Respectfully Submitted,

Pat Brueckner
Chemist



PATCHEM LABORATORIES

2205 First St. #108 • Simi Valley, CA 93065 • (805) 581-9006

Customer: Martin Industrial Pumping
P.O. Box 1128
Canyon Country, CA 91351

Attention: Mr. Tom Martin

Sample Date: 10-2-90

Report Date: 10-23-90

Sample I.D.: 9010-3940

Subject: Bernite Wastewater Sample -- TLIC

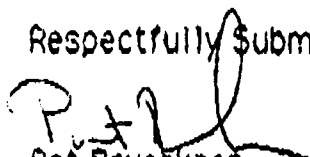
Method: Sample was analyzed per EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846).

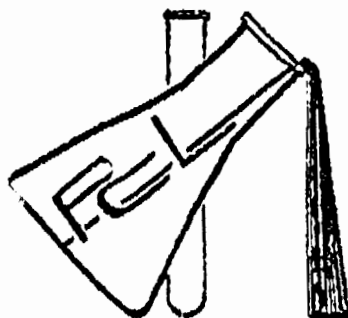
Results:

PARAMETER	EPA METHOD	DETECTION LIMIT	ANALYSIS
Antimony	7040	0.1 mg/L	< 0.1 mg/L
Arsenic	7060	0.05 mg/L	< 0.05 mg/L
Barium	7080	0.1 mg/L	< 0.1 mg/L
Beryllium	7090	0.1 mg/L	< 0.1 mg/L
Cadmium	7130	0.02 mg/L	< 0.02 mg/L
Chromium	7190	0.05 mg/L	< 0.05 mg/L
Chromium VI	7194	0.05 mg/L	< 0.05 mg/L
Cobalt	7200	0.03 mg/L	< 0.03 mg/L
Copper	7290	0.02 mg/L	1.86 mg/L
Lead	7420	0.02 mg/L	0.18 mg/L
Mercury	7471	0.05 mg/L	< 0.05 mg/L
Molybdenum	7490	0.1 mg/L	< 0.1 mg/L
Nickel	7520	0.02 mg/L	3.40 mg/L
Thallium	7840	0.1 mg/L	< 0.1 mg/L
Zinc	7950	0.02 mg/L	5.70 mg/L
Selenium	7740	0.1 mg/L	< 0.1 mg/L
Silver	7760	0.02 mg/L	< 0.02 mg/L
Vanadium	7910	0.1 mg/L	< 0.1 mg/L
Fluoride	340.1	0.02 mg/L	0.34 mg/L

Comments: Sample was prepared per Method 3010 of SW-846 for metals analysis, after TCLP extraction.

Respectfully Submitted,


Pat Brueckner
Chemist



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Attention: Mr. Tom Martin

Sample Date: 10-2-90

Report Date: 10-23-90

Sample I.D.: 9010-3940

Subject: Bernite Wastewater Sample - TTLC

Method: Sample was analyzed per EPA Methods for Chemical Analysis of
Water and Waste (EPA-600/4-79-020).

Results:

PARAMETER	EPA METHOD	DETECTION LIMIT	ANALYSIS
pH	150.1	-	7.8 units
Sulfide - Total	370.1	0.05 mg/L	< 0.05 mg/L
Sulfide - Dissolved	370.1	0.05 mg/L	< 0.05 mg/L
BOD	405.1	-	< 5 mg/L
COD	410.4	-	< 5 mg/L
Suspended Solids	160.2	5 mg/L	8 mg/L
Total Dissolved Solids	160.1	5 mg/L	480 mg/L
Oil & Grease	413.1	5 mg/L	< 5 mg/L
Petroleum Hydrocarbons	418.1	5 mg/L	< 5 mg/L

Respectfully Submitted,


Pat Brueckner
Chemist